

## **REMARKS**

In the Office Action dated October 5, 2004, typographical errors were noted in claims 1 and 7, which have been corrected. Claims 1-3, 5 and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by Hu. Claims 7-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hu in view of Adler et al..

At page 5 of the Office Action, the Examiner acknowledged that the Hu reference does not disclose generating a topogram with the linear scan. Designation of the linear scan as producing a topogram was the subject of original claim 6, and the subject matter of claim 6 has been embodied in independent claim 1. In view of the Examiner's acknowledgment that the Hu reference does not disclose the use of the linear scan to produce a topogram, this is sufficient to overcome the anticipation rejection based on Hu. Based on the expectation that the Examiner would then consider rejecting all claims of the application, rather than only claims 7-9, based on a combination of the teachings of Hu and Adler et al., Applicants will address the teachings of Hu and Adler et al. with regard to all claims of the application.

Hu does not disclose or suggest conducting a rotation scan, and conducting a linear scan to form a topogram, and then combining the data respectively obtained in the rotation scan and in the linear scan (in whatever form) to generate an image of the examination subject. The Hu reference describes obtaining X-ray projection data originating from rotational scanning and straight-line scanning to reconstruct an image of the subject. The only scan path disclosed in the Hu reference, however, is a scan path that is at one point circular and at another point linear, as described in the Hu reference at column 3, lines 58-63 and column 4, lines 9-18. Moreover, there is no disclosure or suggestion in the Hu reference that the linear scan should be

used to produce a topogram, wherein all of the X-ray values in this linear scan originate along a single continuous straight-line path.

Moreover, in the introductory portion of the Hu reference in columns 1 and 2, Hu discusses prior art approaches embodying a combination of a linear scan and a rotational scan, and dismisses those approaches as having disadvantages associated therewith. For this reason, although the scan path disclosed in the Hu reference has linear components, it is not the type of straight-line linear scan path that would even be capable of providing data to generate a topogram.

The Examiner relied on the Adler et al. reference as teaching the generation of a “scout scan,” and the Examiner stated that in the field of medical imaging, the term “scout scan” is a synonym for “topogram.” Applicants do not agree with this statement of the Examiner. It is true that one type of image that can be obtained in a “scout scan” can be a topogram, however, the term “scout scan” is merely a generic term that refers to any type of preliminary image or data that is obtained prior to obtaining the actual diagnostic image. Usually the image or the data obtained in the “scout scan” is used to set one or more parameters for obtaining the diagnostic image.

This is made clear by the fact that the “scout scan” that is undertaken in the Adler et al. reference clearly is *not* for the production of a topogram.

This is made clear in the abstract of the Adler et al. reference, wherein the “scout images” are specifically referred to as 2D CT scout images, which are digital two-dimensional X-ray images produced by the CT scanner. Therefore, in the Adler et al. reference itself, the scout images are *not* topograms, but are instead X-ray


images. Equally as importantly, there is no teaching in the Adler et al. reference that the scout images are or can be obtained in a linear scan.

Therefore, the Hu reference does not disclose or suggest conducting a linear scan to obtain a topogram, and the Adler et al. reference explicitly teaches that the scout images obtained therein are *not* topograms, but are instead two-dimensional X-ray images of the subject. If the Hu reference were modified in accordance with the teachings of Adler et al., therefore, this would merely result in two-dimensional X-ray images, as scout images, being obtained in accordance with the teachings of Adler et al. Since these two-dimensional X-ray images (scout images) are obtained in Adler et al. only for the purpose of organizing the 2D data contained therein in order to generate three-dimensional data of the subject, and since the Hu reference already discloses a scan path for obtaining 3D data, there would be no point to modifying the Hu reference to employ the scout references disclosed in the Adler et al. reference. Equally as importantly, however, there is no teaching in either of the references that the scout images, or the linear components of the scan path in Hu, are for the purpose of generating a topogram.

Claim 4 was indicated to contain allowable subject matter, and new independent claim 10 is therefore submitted herein, which is a combination of original claims 1 and 4.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,



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SCHIFF, HARDIN LLP  
**CUSTOMER NO. 26574**  
Patent Department  
6600 Sears Tower  
233 South Wacker Drive  
Chicago, Illinois 60606  
Telephone: 312/258-5790  
Attorneys for Applicants.

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